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NEW YORK, NY 10112

EXAMINER
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DHARIA, PRABODH M

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 11/26/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/719,523

Applicant(s)

ISONO ET AL.

Examiner

Prabodh M Dharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 34-51 is/are pending in the application.
- 4a) Of the above claim(s) 1-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 15.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

2. The information disclosure statement filed on December 13, 200 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because Document number 60-216387 and 62-206589 neither were supplied with English translation nor Abstract were supplied in English. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 34-44, 48-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Takegami et al. (6,288,485 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding Claim 34, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation with electrons (Col. 7, Lines 4,5) from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for stopping output from the scanning circuit and/or the modulation circuit to the display panel until a signal output from the scanning circuit and/or the modulation circuit to the display panel is determined in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation

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to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 35, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation with electrons (Col. 7, Lines 4,5) from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for delaying output of a signal from the scanning circuit and/or the modulation circuit to the display panel after a power source is turned on in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel, wherein the signal output from the scanning circuit and/or the modulation circuit to the display panel is determined during the delay time (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan, however, during the retrace time signal to pane is delayed from control circuit and also from scan circuit and modulation circuit Col. 18, Lines 11-53).

Regarding Claim 36, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation with electrons (Col. 7, Lines 4,5) from an electron source to a fluorescent substance (Col. 7,

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Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for stopping output from the scanning circuit and/or the modulation circuit to the display panel until a signal output from the scanning circuit and/or the modulation circuit to the display panel is determined in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 37, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation with electrons (Col. 7, Lines 4,5) from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for delaying output of a signal from the scanning circuit and/or the modulation circuit to the display panel after a power source is turned on in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel, wherein the signal output from the scanning circuit and/or the modulation circuit to the display panel is determined during the delay time (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of

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the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan, however, during the retrace time signal to pane is delayed from control circuit and also from scan circuit and modulation circuit Col. 18, Lines 11-53).

Regarding Claim 38, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation with electrons (Col. 7, Lines 4,5) from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for stopping output from the scanning circuit and/or the modulation circuit to the display panel until a power source voltage of the scanning circuit and/or the modulation circuit reaches a desired value in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 39, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31) comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation with electrons (Col. 7, Lines 4,5) from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display

panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for delaying output of a signal from the scanning circuit and/or the modulation circuit to the display panel after a power source is turned on in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel, wherein a power source voltage of the scanning circuit and/or the modulation circuit reaches a desired value during the delay time (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 40, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31), comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation (Col. 7, Lines 4,5) with electrons from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for stopping supply of the acceleration potential until a power source voltage of the scanning circuit and/or the modulation circuit reaches a desired value in starting image display by outputting, a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15,



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Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 41, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31), comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation (Col. 7, Lines 4,5) with electrons from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for delaying supply of the acceleration potential after a power source is turned on in starting image display by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel, wherein a power source voltage of the scanning circuit and/or the modulation circuit reaches a desired value during the delay time (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan, however, during the retrace time signal to pane is delayed from control circuit and also from scan circuit and modulation circuit Col. 18, Lines 11-53).

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Regarding Claim 42, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31), comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation (Col. 7, Lines 4,5) with electrons from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); a control circuit for stopping output of a signal from the scanning circuit and/or the modulation circuit to the display panel, and then stopping supply of power to the scanning circuit and/or the modulation circuit In turning off a power source while an image is displayed by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel.

Regarding Claim 43, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31), comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation (Col. 7, Lines 4,5) with electrons from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for stopping output of a signal from the scanning circuit and/or the modulation circuit to the display panel, and then stopping supply of power to the scanning circuit and/or the modulation circuit in performing emergency shutdown (Col. 15, Lines 13-28) while

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an image is displayed by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

Regarding Claim 44, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31), comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation (Col. 7, Lines 4,5) with electrons from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a control circuit for stopping output of a signal from the scanning circuit and/or the modulation circuit to the display panel, and then stopping supply of power to the scanning circuit and/or the modulation circuit when a voltage abnormality (Col. 15, Lines 22-28) is observed while an image is displayed by outputting a signal from the scanning circuit and/or the modulation circuit to the display panel (Col. 16, Line 50 to Col. 17, Line 14, Col. 17, Lines 38-44, Col. 15, Lines 22-28, Control circuit detect of the vertical Sync and starts scanning and detects horizontal scan starts data modulation to display panel and stops modulation of data at the end of horizontal scan and stops scanning at the end of vertical scan Col. 18, Lines 11-53).

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Regarding Claim 48, Takegami et al. teaches the electron source comprises a plurality of row-direction wiring lines for receiving a scanning signal, a plurality of column-direction wiring lines for receiving a modulation signal, and a plurality of electron-emitting devices connected to the row-direction wiring lines and the column-direction wiring lines (Col. 3, Lines 52-67, Col. 17, Line to Col. 18, Line 10).

Regarding Claim 49, Takegami et al. teaches the acceleration potential for accelerating electrons from the electron source is a potential higher by not less than 500 V than a potential applied to emit electrons in the electron source (Col. 4, Lines 21-31, Several hundred volts, 100-900V).

Regarding Claim 50, Takegami et al. teaches the acceleration potential for accelerating electrons from the electron source is a potential higher by not less than 3,000 V than a potential applied to emit electrons in the electron source (Col. 4, Lines 21-31, Several kV, 1kV-999kV).

Regarding Claim 51, Takegami et al. teaches the acceleration potential for accelerating electrons from the electron source is a potential higher by not less than 5,000 V than a potential applied to emit electrons in the electron source (Col. 17, Lines 53-62).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 45, 46, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takegami et al. (6,288,485) in view of Stendardo et al. (6,064,125).

Regarding Claim 45, Takegami et al. teaches an image display apparatus (Col. 3, Lines 23-31), comprising: a display panel (Col. 3, Lines 28-31) for displaying an image by irradiation (Col. 7, Lines 4,5) with electrons from an electron source to a fluorescent substance (Col. 7, Lines 4-6, Col. 4, Lines 32-42); an acceleration potential supply circuit for supplying to the display panel an acceleration potential for accelerating electrons from the electron source (Col. 4, Lines 32-42); a scanning circuit for supplying a scanning signal to the display panel (Col. 17, 35-44); a modulation circuit for supplying a modulation signal to the display panel (Col. 18, Lines 47-52); and a first power source for supplying power to the acceleration potential supply circuit and/or the scanning circuit and/or the modulation circuit (Col. 17, Line 47 to Col. 18, Line 52).

However, Takegami et al. fails to teach a second power source for supplying power.

However, Stendardo et al. teaches a second power source for supplying power (Backup power supply (Col. 1, Lines 52-67).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Stendardo et al. in Takegami et al. teaching for having an uninterruptible power supply unit in a self-contained housing for coupling between an adapter and an electronic device with polarity sensing system and a polarity switch.

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Regarding Claim 46, Takegami et al. teaches the abnormal state is emergency shutdown (Col. 15, Lines 9-28).

Regarding Claim 47, Stendardo et al. teaches the second power source comprises a capacitor or a battery (Col. 3, lines 53-58).

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is informed that all of the other additional cited references either anticipate or render the claims obvious.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamanmoto (6,259,422) Method for producing image information apparatus.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 703-605-1231. The examiner can normally be reached on M-F 8AM to 5PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-3054938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9341.

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11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Any response to this action should be mailed to:

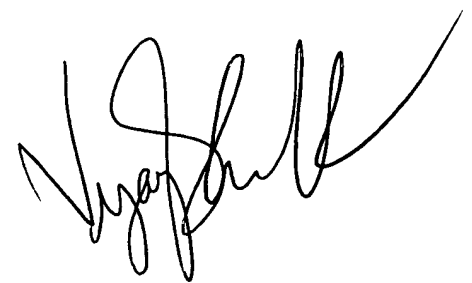
Commissioner of Patents and Trademarks

Washington, D.C. 20231

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November 10, 2003

A handwritten signature in black ink, appearing to read 'Vijay Shankar', with a long, sweeping horizontal stroke extending to the right.

VIJAY SHANKAR  
PRIMARY EXAMINER